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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,355	11/10/2003	Jee-Won Jeong	5000-1-478	4616
33942 7590 04/06/2007 CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			EXAMINER MIRZADEGAN, SAEED S	
			ART UNIT	PAPER NUMBER
			2109	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/705,355

Applicant(s)

JEONG ET AL.

Examiner

Saeed S. Mirzadegan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 1 & 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/10/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of Network Elements must be shown on Fig. 3 or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: "An NE (Network Element)" should be changed to "A Network Element (NE)", "An MO (Managed Object)" should be changed to "A Managed Object (MO)", "An NMS (Network Management System)" should be changed to "A Network Management System (NMS)", in numerous locations.

Appropriate correction is required.

3. The disclosure is objected to because of the following informalities: Page 1, Line 15, should read, "utilized as a basic network management protocols" not "utilized a basic network management protocol".

Appropriate correction is required.

4. The disclosure is objected to because of the following informalities: Page 2, Line 4, should read, "now globally used for large-scaled network management." not "now globally used for large-scaled network management is globally used".

Appropriate correction is required.

5. The disclosure is objected to because of the following informalities: Page 4, Line 13, should read, "developed" not "development".

Appropriate correction is required.

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6. The disclosure is objected to because of the following informalities: Page 7, Line 13, refers to "1-4 shown in FIG 1." where there is no Item 1-4 in FIG. 1.

Appropriate correction is required.

7. The disclosure is objected to because of the following informalities: Page 7, Line 12-14 refers to corresponding functionality between Items 10-2,10-3,1-4 in FIG 1. and items 30-1,30-2,30-3 and 30-5; it further refers to NMS 30-4 and NMS 10-1 as correspondingly functional. The correspondence is unclear since the protocols used are different. Additional clarifications are needed.

Appropriate correction is required.

### ***Claim Objections***

8. **Claims 1 & 11** are objected to because of the following informalities: "An NE (Network Element)" should be changed to "A Network Element (NE)".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

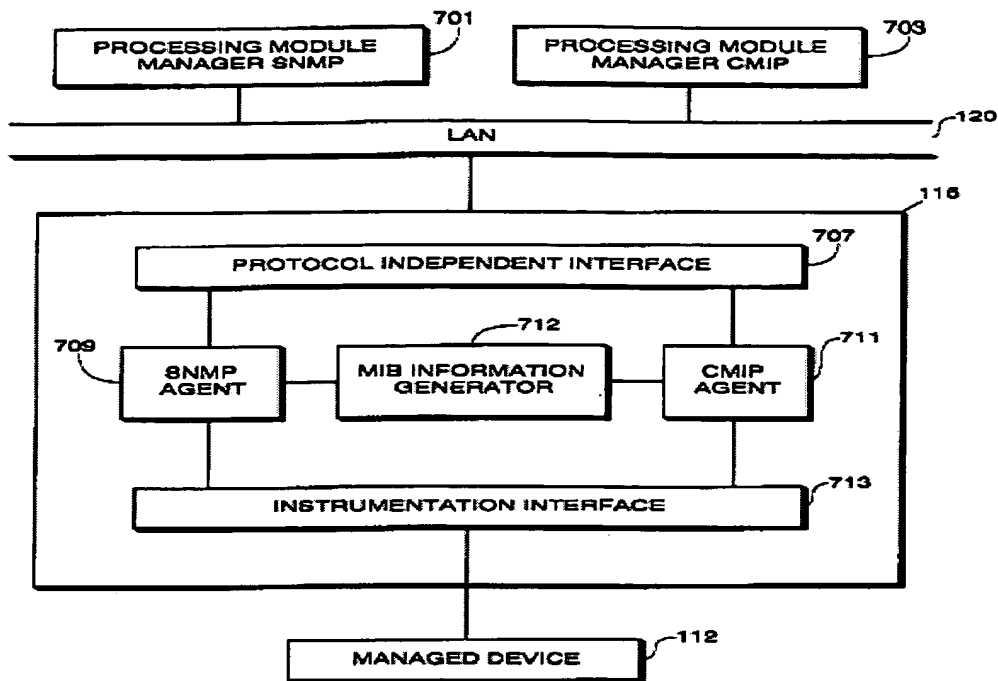
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1-4,11-14** are rejected under 35 U.S.C. 102(b) as being anticipated by Villalpando (US Patent No. 6219718 B1, hereafter "Villalpando").

10. Regarding **Claim 1**, Villalpando discloses, An NE (Network Element) system for providing an independent multi-protocol service, comprising: a plurality of NEs for configuring a network (**Col. 2, line 61, teaches a networked computer system**); management systems for supervising operations (**Col. 2, lines 62 & 64-66, teaches processing modules that manage the peripheral devices**) of the plural NEs and providing services for the NEs (**Col. 2, lines 66-67, teaches one or more peripheral devices**); and a domain service bridge arranged between the NEs and the management systems, wherein the domain service bridge is coupled to the NEs through a protocol for use in the NEs, and the domain service bridge is coupled to the management systems through protocols corresponding to the management systems (**Fig. 7 & Col. 3, lines 2-6) teaches a generating unit coupled between the managed peripheral devices and the processing modules.**

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**FIG. 7**

11. Regarding **Claim 2**, Villalpando discloses, the system of claim 1, wherein the corresponding protocols differ from said protocol for use in the NEs (Col. 3, lines 27-28) teaches different management protocols.

12. Regarding **Claim 3**, Villalpando discloses, the system of claim 2, wherein the corresponding protocols respectively correspond to the management systems (Col. 3, lines 35-36) teaches management protocols corresponding to the processing module.

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13. Regarding **Claim 4**, Villalpando discloses, the system of claim 1, wherein the corresponding protocols respectively correspond to the management systems (**Col. 3, lines 35-36) teaches management protocols corresponding to the processing module.**

14. Regarding **Claim 11**, Villalpando discloses, An NE (Network Element) method for providing an independent multi-protocol service, comprising: providing a plurality of NEs for configuring a network (**Col. 2, line 61, teaches a networked computer system**); providing management systems for supervising operations (**Col. 2, lines 62 & 64-66, teaches processing modules that manage the peripheral devices**) of the plural NEs and providing services for the NEs (**Col. 2, lines 66-67, teaches one or more peripheral devices**); and arranging a domain service bridge arranged between the NEs and the management systems, wherein the domain service bridge is coupled to the NEs through a protocol for use in the NEs, and the domain service bridge is coupled to the management systems through protocols corresponding to the management systems (**Fig. 7 & Col. 3, lines 2-6) teaches a generating unit coupled between the managed peripheral devices and the processing modules.**

15. Regarding **Claim 12**, Villalpando discloses, the method of claim 11, wherein the corresponding protocols differ from said protocol for use in the NEs (**Col. 3, lines 27-28) teaches different management protocols.**



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16. Regarding **Claim 13**, Villalpando discloses, the method of claim 12, wherein the corresponding protocols respectively correspond to the management systems (**Col. 3, lines 35-36**) teaches management protocols corresponding to the processing modules.

17. Regarding **Claim 14**, Villalpando discloses, the system of claim 11, wherein the corresponding protocols respectively correspond to the management systems (**Col. 3, lines 35-36**) teaches management protocols corresponding to the processing module.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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18. **Claims 5-7,15-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Villalpando as applied to claims 1 & 11 above, and in view of Britton et al. (US Patent No. 5491693, hereafter be referred to as "Britton et al.").

19. Regarding **Claim 5** Villalpando discloses the system of claim 1, wherein the domain service bridge comprises: managed objects being managed by the management systems on the basis of received NE information.

20. Regarding **Claim 5** Villalpando does not teach the system of claim 1, further comprising a protocol adapter for coupling the domain service bridge to the NEs and a plurality of protocol adapters for coupling the domain service bridge to the management systems.

21. In the same field of endeavor, Britton et al. teach, **(col.3, lines 13-19 & 27-30, and FIG 1. & Fig 2.) a protocol adapter for coupling the bridge to the network element and a plurality of protocol adapters for coupling the bridge to the management systems.**

22. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine Villalpando and Britton et al. to incorporate protocol adapters in place of instrumentation interfaces to improve access speed to information allow management of wider group of Network Elements.

23. Regarding **Claim 6**, Villalpando discloses, the system of claim 5, wherein the corresponding protocols differ from said protocol for use in the NEs **(Col. 3, lines 27-28) teaches different management protocols.**

24. Regarding **Claim 7**, Villalpando discloses, the system of claim 5, wherein the corresponding protocols respectively correspond to the management systems **(Col. 3, lines 35-36) teaches management protocols corresponding to the processing module.**

25. Regarding **Claim 15** Villalpando discloses the method of claim 11, wherein the domain service bridge comprises: managed objects being managed by the management systems on the basis of received NE information.

26. Regarding **Claim 15** Villalpando does not teach the system of claim 11, further comprising a protocol adapter for coupling the domain service bridge to the NEs; and a plurality of protocol adapters for coupling the domain service bridge to the management systems

27. In the same field of endeavor, Britton et al. et al. teach, **(col.3, lines 13-19 & 27-30, and FIG 1. & Fig 2.) a protocol adapter for coupling the bridge to the network**

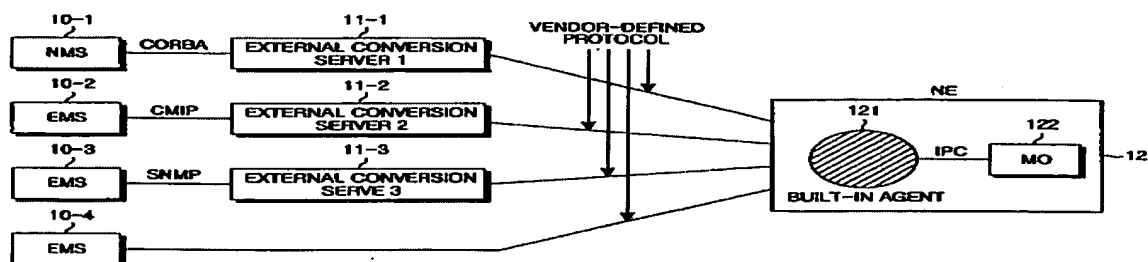
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element and a plurality of protocol adapters for coupling the bridge to the management systems.

28. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine Villalpando and Britton et al. to incorporate protocol adapters in place of instrumentation interfaces to improve access speed to information allow management of wider group of Network Elements.

29. Regarding **Claim 16**, Villalpando discloses, the method of claim 15, wherein the corresponding protocols differ from said protocol for use in the NEs (**Col. 3, lines 27-28**) teaches different management protocols.

30. Regarding **Claim 17**, Villalpando discloses, the method of claim 15, wherein the corresponding protocols respectively correspond to the management systems (**Col. 3, lines 35-36**) teaches management protocols corresponding to the processing module.



**FIG. 1**  
**PRIOR ART**

31. **Claims 8, 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Villalpando with Britton et al. as applied to claims 5 & 15 above, further in view of applicants admitted prior art (hereafter "APA"), and Gieseke (US Patent No. 6967956 B1, hereafter "Gieseke").

32. Regarding **Claim 8** Villalpando discloses the system of claim 5, wherein the protocols corresponding to the management systems comprise SNMP (Simple Network Management protocol) & CMIP (Common Management Information Protocol).

33. Regarding **Claim 8** Villalpando does not teach the system of claim 5, wherein the protocols corresponding to the management systems comprise CORBA (Common Object Request Broker Architecture) protocol and RMON (Remote Network Monitoring) protocol.

34. Regarding **Claim 8**, Fig.1, admitted as prior art by the applicant shows protocols corresponding to the management systems comprise SNMP (Simple Network Management protocol) & CMIP (Common Management Information Protocol) and CORBA (Common Object Request Broker Architecture) protocol.

35. In the same field of endeavor, Gieseke teaches, **(page 1 [0006] lines 1-6) SNMP and RMON are both open protocols utilized for network management applications. SNMP and RMON protocols are of a request-response type, and**

**operate between a management facility and an agent to get and set network device variables. Requests in these protocols are typically initiated by the management facility.**

36. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine Villalpando, as previously combined with Britton et al. to produce a bridge capable of converting the protocols between network elements and management modules, with Gieseke and APA to add additional well known management protocols to the bridge thereby enhancing the bridges management services to the network elements by offering more translation capabilities.

37. Regarding **Claim 18** Villalpando discloses the method of claim 15, wherein the protocols corresponding to the management systems comprise SNMP (Simple Network Management protocol) & CMIP (Common Management Information Protocol).

38. Regarding **Claim 18** Villalpando does not teach the system of claim 15, wherein the protocols corresponding to the management systems comprise CORBA (Common Object Request Broker Architecture) protocol and RMON (Remote Network Monitoring) protocol.

39. Regarding **Claim 18**, Fig.1, admitted as prior art by the applicant shows protocols corresponding to the management systems comprise SNMP (Simple Network

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Management protocol) & CMIP (Common Management Information Protocol) and CORBA (Common Object Request Broker Architecture) protocol.

40. In the same field of endeavor, Gieseke teaches, (page 1 [0006] lines 1-6) **SNMP and RMON are both open protocols utilized for network management applications. SNMP and RMON protocols are of a request-response type, and operate between a management facility and an agent to get and set network device variables. Requests in these protocols are typically initiated by the management facility.**

41. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine Villalpando, as previously combined with Britton et al. to produce a bridge capable of converting the protocols between network elements and management modules, with Gieseke and APA to add additional well known management protocols to the bridge thereby enhancing the bridges management services to the network elements by offering more translation capabilities.

42. **Claims 9, 10, 19 & 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Villalpando as applied to claims 1 & 11 above, in view of Gieseke and APA.

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43. Regarding **Claim 9** Villalpando discloses the system of claim 1, wherein the protocols corresponding to the management systems comprise SNMP (Simple Network Management protocol) & CMIP (Common Management Information Protocol).

44. Regarding **Claim 9** Villalpando does not teach the system of claim 1, wherein the protocols corresponding to the management systems comprise CORBA (Common Object Request Broker Architecture) protocol and RMON (Remote Network Monitoring) protocol.

45. Regarding **Claim 9** Fig.1, admitted as prior art by the applicant shows protocols corresponding to the management systems comprise SNMP (Simple Network Management protocol) & CMIP (Common Management Information Protocol) and CORBA (Common Object Request Broker Architecture) protocol.

46. In the same field of endeavor, Gieseke teaches, **(page 1 [0006] lines 1-6) SNMP and RMON are both open protocols utilized for network management applications. SNMP and RMON protocols are of a request-response type, and operate between a management facility and an agent to get and set network device variables. Requests in these protocols are typically initiated by the management facility.**



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47. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine Villalpando with Gieseke and APA to add additional well-known management protocols to the bridge thereby enhancing the bridges management services to the network elements by offering more translation capabilities.

48. Regarding **Claim 10** Villalpando discloses, the system of claim 9, wherein the corresponding protocols differ from said protocol for use in the NEs (**Col. 3, lines 27-28**) teaches different management protocols.

49. Regarding **Claim 19** Villalpando discloses the method of claim 11, wherein the protocols corresponding to the management systems comprise SNMP (Simple Network Management protocol) & CMIP (Common Management Information Protocol).

50. Regarding **Claim 19** Villalpando does not teach the method of claim 11, wherein the protocols corresponding to the management systems comprise CORBA (Common Object Request Broker Architecture) protocol and RMON (Remote Network Monitoring) protocol.

51. Regarding **Claim 19** Fig.1, admitted as prior art by the applicant shows protocols corresponding to the management systems comprise SNMP (Simple Network Management protocol) & CMIP (Common Management Information Protocol) and CORBA (Common Object Request Broker Architecture) protocol.

52. In the same field of endeavor, Gieseke teaches, **(page 1 [0006] lines 1-6) SNMP and RMON are both open protocols utilized for network management applications. SNMP and RMON protocols are of a request-response type, and operate between a management facility and an agent to get and set network device variables. Requests in these protocols are typically initiated by the management facility.**

53. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine Villalpando with Gieseke and APA to add additional well-known management protocols to the bridge thereby enhancing the bridges management services to the network elements by offering more translation capabilities.

54. Regarding **Claim 20** Villalpando discloses, The method of claim 19, wherein the corresponding protocols differ from said protocol for use in the NEs **(Col. 3, lines 27-28) teaches different management protocols.**

55. Regarding **Claim 20**, Fig.1, admitted as prior art by the applicant and **(page 3, lines 8-9) teaches the external conversion servers 11-1, 11-2 and 11-3 convert a protocol used in the NE 12 into a protocol used in the NMSs 10-1, 10-2, 10-3 and 10-4.**

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Steinberger et al. (US Patent No. US6219705B1) teach System and method of collecting and maintaining historical top communicator information on a communication device; Tinsley et al. (US Patent No. 6967959B1) teach Methods and systems for providing message translation, accounting and routing service in a multi-protocol communications network environment; Warren (US PG PUB No. 2003/0204612A1) teaches system and method for facilitating device communication, management and control in a network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed S. Mirzadegan whose telephone number is 571-270-3044. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SSM



N. DREW RICHARDS  
PRIMARY EXAMINER